

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Canceled).
- 2-15. (Withdrawn).
16. (Canceled).
17. (Canceled).
18. (Currently Amended) A stereoscopic display device of a one-dimensional integral photography system, comprising: according to claim 1, further comprising
a display unit including a display plane in which pixels are arranged flatly
in a matrix shape;
a parallax barrier including a plurality of apertures or a plurality of lenses
and being configured to control directions of rays from the pixels
such that a horizontal disparity is included but a vertical disparity is
not included; and
a detecting mechanism which detects an out-of-viewing zone to the display plane in up and down or front and rear directions, the

detecting mechanism being a vertical direction indicator having a cyclic structure in a vertical direction,

a horizontal direction pitch of the parallax barrier being integer times a horizontal pitch of the pixels, the display plane of the display unit being divided so as to correspond to elemental images for respective apertures or the lenses of the parallax barrier, and an image subjected to a perspective projection in a fixed viewing distance in a vertical direction and subjected to an orthographic projection in a horizontal direction being divided and arranged for respective columns of the pixels.

19. (Currently Amended) A stereoscopic display device of a one-dimensional integral photography system, comprising: according to claim 1, further comprising
a display unit including a display plane in which pixels are arranged flatly in a matrix shape;
a parallax barrier including a plurality of apertures or a plurality of lenses and being configured to control directions of rays from the pixels such that a horizontal disparity is included but a vertical disparity is not included; and
a detecting mechanism which detects an out-of-viewing zone to the display plane in up and down or front and rear directions, the detecting mechanism having a blind structure;

a horizontal direction pitch of the parallax barrier being integer times a horizontal pitch of the pixels, the display plans of the display unit being divided so as to correspond to elemental images for respective apertures or the lenses of the parallax barrier, and an image subjected to a perspective projection in a fixed viewing distance in a vertical direction and subjected to an orthographic projection in a horizontal direction being divided and arranged for respective columns of the pixels.

20. (Original) A stereoscopic display device of a one-dimensional integral photography system according to claim 19, wherein the blind structure has a curved shape.
21. (Canceled).